## 1 ABSTRACT

A modular human habitat simulator for providing an environment on Earth that approximates, controlled test situation, a number of conditions expected to exist when an inflatable modular habitat is deployed into Earth orbit. The simulator has a housing with a rigid wall defining an internal volume, a longitudinal axis, a first and second opposing openings along the longitudinal axis, the rigid wall having an exterior surface, and an interior surface where the interior surface is generally the shape of an interior surface of a deployed inflatable shell of a modular human habitat, and the internal volume is substantially that of a deployed inflatable modular human habitat volume.